

Title (en)

SQUARE-TYPE SECONDARY BATTERY AND METHOD FOR MANUFACTURING SAME

Title (de)

QUADRATISCHE SEKUNDÄRBATTERIE UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

BATTERIE SECONDAIRE DE FORME CARRÉE ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 4131590 A1 20230208 (EN)**

Application

**EP 21777133 A 20210119**

Priority

- JP 2020058248 A 20200327
- JP 2021001687 W 20210119

Abstract (en)

A rectangular secondary battery includes an electrode body, a rectangular battery case housing the electrode body, a sealing plate, a current collector extending on an end side of the sealing plate in a longitudinal direction thereof and joined, by ultrasonic welding, to an end of a positive electrode plate or a negative electrode plate, and an external terminal provided outside the sealing plate and connected to the current collector. The sealing plate has a gas discharge valve ruptured when the internal gas pressure of the battery case has reached a predetermined value or greater, and a thin portion formed between the external terminal and the gas discharge valve and formed thicker than the gas discharge valve.

IPC 8 full level

**H01M 50/147** (2021.01); **H01M 50/342** (2021.01); **H01M 50/531** (2021.01)

CPC (source: EP)

**H01M 10/04** (2013.01); **H01M 10/052** (2013.01); **H01M 50/103** (2021.01); **H01M 50/147** (2021.01); **H01M 50/15** (2021.01); **H01M 50/176** (2021.01); **H01M 50/30** (2021.01); **H01M 50/342** (2021.01); **H01M 50/3425** (2021.01); **H01M 50/531** (2021.01); **H01M 50/536** (2021.01); **H01M 50/55** (2021.01); **H01M 50/553** (2021.01); **H01M 50/566** (2021.01); **H01M 50/578** (2021.01); **H01M 2200/20** (2013.01); **Y02E 60/10** (2013.01); **Y02P 70/50** (2015.11)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**EP 4131590 A1 20230208**; **EP 4131590 A4 20231011**; CN 115210941 A 20221018; CN 115210941 B 20240514; JP WO2021192544 A1 20210930; WO 2021192544 A1 20210930

DOCDB simple family (application)

**EP 21777133 A 20210119**; CN 202180018243 A 20210119; JP 2021001687 W 20210119; JP 2022509314 A 20210119